

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	2961294
<b>Application Number:</b>	10716078
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	4787
<b>Title of Invention:</b>	Systems and methods for implementing path length control for quantum cryptographic systems
<b>First Named Inventor/Applicant Name:</b>	Oleksiy Pikalo
<b>Customer Number:</b>	28120
<b>Filer:</b>	Michael Jeremy Chasan
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	BBNT-P02-097
<b>Receipt Date:</b>	06-MAR-2008
<b>Filing Date:</b>	18-NOV-2003
<b>Time Stamp:</b>	17:15:34
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 180
RAM confirmation Number	2439
Deposit Account	181945
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

# File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement Letter	BBNT-P02-097_IDS.pdf	78527	no	3
			82757e907b0c0c9300673911e25bc96e9c0b5130		
Warnings:					
Information:					
2	NPL Documents	WO9607951.pdf	1061598	no	27
			d3bee8ec90c5a8694d2ce17e7243c9b7579dcdb		
Warnings:					
Information:					
3	NPL Documents	OA_dated_03-31-05.pdf	710730	no	18
			64cc3d14c7d9b00c1c7aac3dd3d9771a89350c50		
Warnings:					
Information:					
4	NPL Documents	FOA_dated_10-06-05.pdf	479219	no	10
			02305c1eb6e47d5da071ec5d163efb135c3a0189		
Warnings:					
Information:					
5	NPL Documents	FOA_dated_10-05-05.pdf	588309	no	12
			ed13672b549c3d54e1bf0206eaa96d46e2c7b4e7		
Warnings:					
Information:					
6	NPL Documents	FOA_dated_11-17-06.pdf	1002600	no	19
			cb274015aa354733ebc0c5afaa96d46ee9763917		
Warnings:					
Information:					
7	NPL Documents	OA_dated_02-15-06.pdf	1057390	no	25
			ee1c7e4499ca329f3c980145000e933b0c10b		
Warnings:					
Information:					
8	NPL Documents	OA_dated_08-08-06.pdf	1336399	no	28
			8a3d56a73dab7174d270632074706507503b04		
Warnings:					
Information:					

9	NPL Documents	OA_dated_11-26-07.pdf	942513 470b65037d2c73785ee4307a71842b 0015190c	no	18
Warnings:					
Information:					
10	NPL Documents	Multi-Protocol_Lambda_Switching-Issues_In_Combining_MPLS_Traffic.pdf	417367 684dc477a4a8ba18769278315c7ab73c 8be613f	no	9
Warnings:					
Information:					
11	NPL Documents	Quantum_Cryptography-Public_Key_Distribution_And_Coin_Tossing.pdf	450490 79f13a2097867c0dc055019492f119e6 3ca76c8c	no	5
Warnings:					
Information:					
12	NPL Documents	An_Autocompensating_Fiber_Optic_Qantum_Cryptography_System.pdf	793328 960050d92a3c3cbb85e3ed3c36643a01b5 c0681e97	no	8
Warnings:					
Information:					
13	NPL Documents	Prototype_Autocompensating_Quantum_Cryptography.pdf	337563 e7e929c26e6895533a0d74c50462855 c08f1a02	no	4
Warnings:					
Information:					
14	NPL Documents	Optical_Network_And_Component_Trends.pdf	3136687 54bd0d679c7759b8da1cc0b1775c0990 ee41a0cc	no	51
Warnings:					
Information:					
15	NPL Documents	Multiparty_Key_Distribution_And_Secret_Sharing.pdf	148861 5dc2ee5813c431725c1e783c04db1543 3077bd06	no	8
Warnings:					
Information:					
16	NPL Documents	Quantum_Cryptography_Defies_Eavesdropping.pdf	700283 c927214d08893d3000cd39963c25131 3362b0c	no	3
Warnings:					
Information:					
17	NPL Documents	Secure_Multi-Party_Quantum_Computation.pdf	218716 262b6444c288582c30a8570c30c3d4e6c3d 68a2a2d	no	10
Warnings:					
Information:					

18	NPL Documents	Small_Forwarding_Tables_For_Fast_Routing_Lookups.pdf	1092053 bf7c078f834664ab558149882e9b0d1463 be9b20e3	no	12
<b>Warnings:</b>					
<b>Information:</b>					
19	NPL Documents	Lucent_Technologies_Name_s_Cherry_Murray_Physical_Sciences_Research.pdf	145088 5a299a39c1e587608103dcb1b201a3c323bc 875a1187	no	3
<b>Warnings:</b>					
<b>Information:</b>					
20	NPL Documents	Quantum_Cryptography_Based_On_Bells_Theorem.pdf	209581 b122b450f9ab67d4293857610d55cd0aa9 bcd5cab	no	3
<b>Warnings:</b>					
<b>Information:</b>					
21	NPL Documents	Building_The_Quantum_Network.pdf	979773 599145952cd80782200cb77414930a3b 7bb3a7fe	no	10
<b>Warnings:</b>					
<b>Information:</b>					
22	NPL Documents	Security_Issues_In_Policy_Routing.pdf	696134 08761440b152a25a7e9e50223d8dc055 d31e6b6	no	11
<b>Warnings:</b>					
<b>Information:</b>					
23	NPL Documents	Violations_Of_A_New_Inequality.pdf	468860 39baa299ae50263d542192b782b311f61 03a507d7	no	10
<b>Warnings:</b>					
<b>Information:</b>					
24	NPL Documents	Distributed_Scalable_Routing_Based_On_Vectors_Of_Link_States.pdf	1169326 9cd2eda353cd4222323b66a2a05612e 2501a1841	no	13
<b>Warnings:</b>					
<b>Information:</b>					
25	NPL Documents	Scalable_Link-State_Internet_Routing.pdf	858584 5741f1f359fb3554f7b8aac1d8f05e0b4b 144cda	no	10
<b>Warnings:</b>					
<b>Information:</b>					
26	NPL Documents	Quantum_Cryptography_And_Long_Distance_Bell_Experiments.pdf	358755 cb4b8db73ab741a6db8333063dfe999 9ef0c7ba	no	12
<b>Warnings:</b>					
<b>Information:</b>					

27	NPL Documents	Quantum_Cryptography_On_Noisy_Channels.pdf	391170 c8b9e6ddc1716291fb4366e6f4f3d456f8506ee	no	4
<b>Warnings:</b>					
<b>Information:</b>					
28	NPL Documents	Secure_Quantum_Key_Distribution_Using_Squeezed_States.pdf	216252 5d0673e3649eb0385eef80a7ea7000304e5c6a337	no	18
<b>Warnings:</b>					
<b>Information:</b>					
29	NPL Documents	Differential-Phase-Shift_Quantum_Key_Distribution.pdf	713576 70843d1c22a91942177b01b05419c05853103593a	no	8
<b>Warnings:</b>					
<b>Information:</b>					
30	NPL Documents	A_Novel_IP-Routing_Lookup_Scheme.pdf	919997 71ae2ff2b16327c70b9c3ed9531221c713796-cd1a	no	12
<b>Warnings:</b>					
<b>Information:</b>					
31	NPL Documents	Laser_End_Point_Detection_System.pdf	113117 f62e4a1741ad9621296a361ae471328c472b6206e	no	2
<b>Warnings:</b>					
<b>Information:</b>					
32	Information Disclosure Statement (IDS) Filed	BBNT-P02-097_IDS_SB08.pdf	126982 6cc0021064f6100df9d3c1ae04e1e16cd91465	no	8
<b>Warnings:</b>					
<b>Information:</b>					
This is not an USPTO supplied IDS fillable form					
33	NPL Documents	Turnstile_Device_For_Heralded_Single_Photons.pdf	371987 f4992a501c5e90565050db61ac447d1026d03b7d7	no	4
<b>Warnings:</b>					
<b>Information:</b>					
34	NPL Documents	Quantum_Cryptography_With_Entangled_Photons.pdf	430535 99fb07bdcd059564bca93cd12096ae5f34009f6	no	4
<b>Warnings:</b>					
<b>Information:</b>					
35	NPL Documents	High-Speed_Policy-based_Packet_Forwarding_Using_Efficient.pdf	1241684 3d9b7d2105398058032a1a17a9a9e0af11a0a26	no	12

<b>Warnings:</b>					
<b>Information:</b>					
36	NPL Documents	IP_Lookups_Using_Multiway_And_Multicolumn_Search.pdf	1151054 ae594a658e7af782b64a5e08814191ac32ba35c7	no	11
<b>Warnings:</b>					
<b>Information:</b>					
37	NPL Documents	Free_Space_Micromachined_Optical_Switches_For_Optical_Networking.pdf	466425 605141bb67ebaa1932096356822350e42d805cd17	no	6
<b>Warnings:</b>					
<b>Information:</b>					
38	NPL Documents	A_Practical_Protocol_For_Advantage_Distillation.pdf	1009543 5dea77f0b5e6f799589545a7c8a3c2159cd4cd5	no	24
<b>Warnings:</b>					
<b>Information:</b>					
39	NPL Documents	Information-Theoretic_Key_Agreement.pdf	1041700 4a8b6213532520b00093348551292cd60562c0ab	no	20
<b>Warnings:</b>					
<b>Information:</b>					
40	NPL Documents	Unconditionally_Secure_Key_Agreement.pdf	1257013 a55db2322906bdc7869c85b62ba8693bae054555	no	16
<b>Warnings:</b>					
<b>Information:</b>					
41	NPL Documents	Intrinsic-Stabilization_Unidirectional_Quantum_Key_Distribution.pdf	329367 aee0e24752725ae135cd52b17d773a2ba409ab7b1	no	7
<b>Warnings:</b>					
<b>Information:</b>					
42	NPL Documents	Entangled_State_Quantum_Cryptography.pdf	470042 191bd579ac226358caaff14c92cac1832443d38174	no	4
<b>Warnings:</b>					
<b>Information:</b>					
43	NPL Documents	BB84_Quantum_Key_Distribution_Planar_Lightwave_Circuits.pdf	337405 c5c2adb7904c3b3dc1c52620ea0dbbe4c3903e	no	11
<b>Warnings:</b>					
<b>Information:</b>					
44	NPL Documents	Silicon_Integrated_Photonics.pdf	17995735 e9304074b20db8149c60c93818cd48a5624c3e7	no	30

<b>Warnings:</b>					
<b>Information:</b>					
45	NPL Documents	Multi-User_Quantum_Cryptography_On_Optical_Networks.pdf	530638 e7aa1156ce6f529595b64b012263e77c2b819398	no	10
<b>Warnings:</b>					
<b>Information:</b>					
46	NPL Documents	Quantum_Public_Key_Distribution_System.pdf	682281 70d483d8a245d5a1a22e2cf135f3ae8f1ca6c982	no	11
<b>Warnings:</b>					
<b>Information:</b>					
47	NPL Documents	Hierarchically-organized_Multithop_Mobile_Wireless_Networks.pdf	1649276 099867b71b0a3ed1e0bfef1642a0dca55b0ee29f	no	19
<b>Warnings:</b>					
<b>Information:</b>					
48	NPL Documents	Long-distance_Entanglement-based_Quantum_Key_Distribution.pdf	1245116 fa85b6927506d03a20d47c959d22ca8d082b172b	no	12
<b>Warnings:</b>					
<b>Information:</b>					
49	NPL Documents	Multi-Protocol_Label_Switching_Architecture.pdf	105992 e96733d14667d8ed67b763954ca080d062eece6db	no	61
<b>Warnings:</b>					
<b>Information:</b>					
50	NPL Documents	Quantum_Cryptography_Protocols_Robust_Against_Photon_Number.pdf	144499 e68221e4c5cb34c02f9933c8b4cb0e8a2b6caee16	no	2
<b>Warnings:</b>					
<b>Information:</b>					
51	NPL Documents	Quantum_Cryptography_Protocols_Robust_Against_Photon_Number_splitting.pdf	104370 73a9584369e1ae417928f1c302a80cfcf05eab749	no	4
<b>Warnings:</b>					
<b>Information:</b>					
52	NPL Documents	Applied_Cryptography.pdf	1731956 0133aa1ee69f880cb10020110fb38aeb0d208a0af	no	6
<b>Warnings:</b>					
<b>Information:</b>					
53	NPL Documents	Defense_Frontier_Analysis_Of_Quantum_Cryptographic_Systems.pdf	925217 55158b065c54496701102502bc348962739af0ce	no	10

<b>Warnings:</b>					
<b>Information:</b>					
54	NPL Documents	Quantum_Key_Distribution_Over_67_KM.pdf	414062 3e3d38eeca5911ab0b8831345e37773c220c9c49	no	8
<b>Warnings:</b>					
<b>Information:</b>					
55	NPL Documents	PPLN_Waveguide_For_Quantum_Communication.pdf	250992 e014a9184169e55e1c2855da423385a175293c0fb	no	6
<b>Warnings:</b>					
<b>Information:</b>					
56	NPL Documents	Long-Distance_Bell-Type_Test.pdf	1628001 35e534de9e5c422b965c4bc2e2e540dc50131641c	no	14
<b>Warnings:</b>					
<b>Information:</b>					
57	NPL Documents	Recent_Progress_In_Quantum_Key_Transmission.pdf	718019 593d372023c3b35ae0f7e978c1c2207a29e2058	no	8
<b>Warnings:</b>					
<b>Information:</b>					
58	NPL Documents	Enhanced_Single_Photon_Fringe.pdf	360097 7c4aa2430f4083009a7f648a3e346aedf53b2923	no	3
<b>Warnings:</b>					
<b>Information:</b>					
59	NPL Documents	Secure_Key_Distribution_System.pdf	378004 691ee20caad51641874061bd2805b1945263b53	no	3
<b>Warnings:</b>					
<b>Information:</b>					
60	NPL Documents	Single_Photon_Interference_In_10_KM.pdf	250931 ef15b5209d12ac335f953a683764873b622277	no	2
<b>Warnings:</b>					
<b>Information:</b>					
61	Fee Worksheet (PTO-06)	fee-info.pdf	8220 695ee2ad588100c153c93359a36a4bc39736c409	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			59149989		



This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.